

## What are the symptoms of **PLAQUE**

Symptoms of pneumonic plague usually appear within 1-6 days of exposure. They include:

**Fever**

**Headache**

**Weakness**

**Rapidly developing  
pneumonia**

**Shortness of breath**

**Chest pain**

**Cough**

**Bloody or watery mucus**  
(in some cases).

Without early treatment, disease may cause respiratory failure.

Symptoms of bubonic plague usually appear within 2-6 days from exposure and include painful and swollen lymph glands, fever and chills, rapid shock.

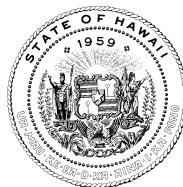
Illness will result in death if not treated early.

*For more information, call*

**Aloha United Way**



[www.hawaii.gov/doh](http://www.hawaii.gov/doh)  
or  
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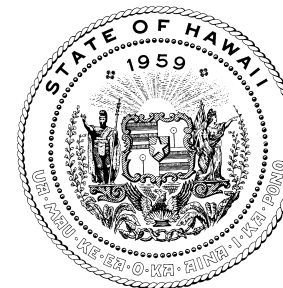
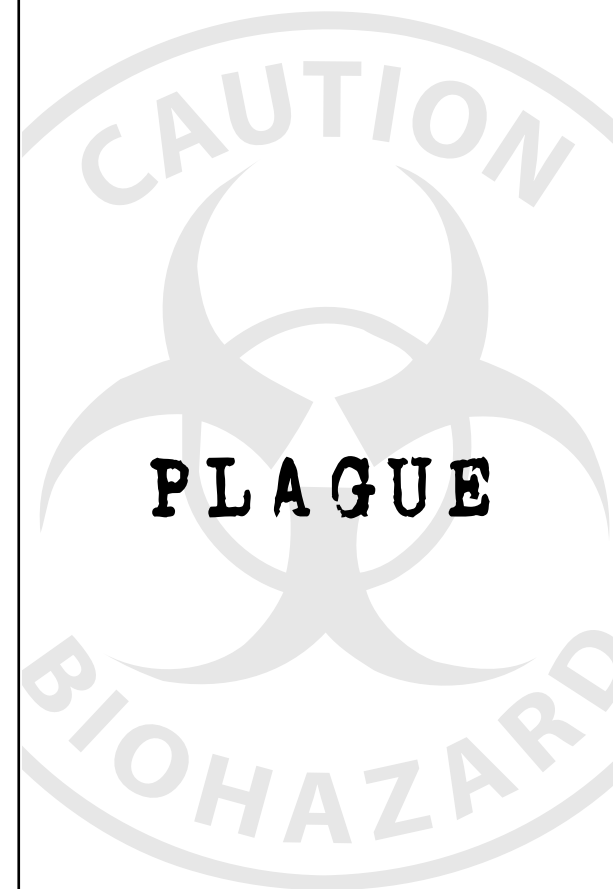
Linda Lingle, Governor

Chiyome L. Fukino, M.D., Director of Health



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Hawaii State Department of Health  
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Call 2-1-1

## What is plague?



Plague is a deadly infectious disease caused by the bacterium *Yersinia pestis*. This bacterium is found naturally in rodents and their fleas

and occurs in many areas of the world. There are three types of plague:

- **Pneumonic plague** occurs when the plague bacteria is inhaled.
- **Bubonic plague** occurs when an infected flea bites a person. This is the most common type of plague.
- **Septicemic plague** occurs when plague bacteria multiply in the blood. It can be a complication of pneumonic or bubonic plague or it can occur by itself.

## How is plague spread?

Pneumonic plague occurs when plague bacteria infects the lungs. This could happen:



- If plague bacteria were sprayed in the air during a bioterrorism attack.
- When respiratory droplets from a person (or animal) infected with pneumonic plague are inhaled by others. Respiratory droplets are spread most readily by coughing or sneezing. Becoming infected in this way usually requires direct and close (within 6 feet) contact with the ill person or animal.
- When bubonic or septicemic plague is untreated and the infection spreads to the lungs.

Bubonic plague is spread when infected fleas bite humans or animals. Bubonic plague cannot be spread from person to person.

## What are the symptoms of plague?

Symptoms of pneumonic plague usually appear within 1–6 days of exposure. They include:

- Fever
- Headache
- Weakness
- Rapidly developing pneumonia
  - Shortness of breath
  - Chest pain
  - Cough
  - Bloody or watery mucus (in some cases).



Without early treatment, disease may cause respiratory failure.

Symptoms of bubonic plague usually appear within 2–6 days from exposure and include painful and swollen lymph glands, fever and chills, rapid shock. Illness will result in death if not treated early.



## How is plague treated?

Doctors can prescribe antibiotics to treat plague. Treatment is most effective when it is started early. Antibiotic treatment for 7 days will protect people who have had direct, close contact with infected patients. Wearing a close-fitting surgical

mask also helps protect against infection. Currently there is no vaccine against plague.

## What should you do if you were exposed to plague?

Get immediate medical attention. To prevent illness, a person who has been exposed to pneumonic plague must receive antibiotic treatment as soon as possible. If an exposed person becomes ill, antibiotics must be given within 24 hours of their first symptoms to reduce the risk of death.

## Where is plague found?

Plague is a naturally occurring disease found worldwide. An average of 5 to 15 cases occur annually in the western United States. These cases are usually scattered and occur in rural to semi-rural areas. Most cases are of the bubonic form of the disease. Naturally occurring pneumonic plague is uncommon, although small outbreaks do occur.

## Why are there concerns about pneumonic plague as a bioweapon?

The bacterium that causes plague occurs in nature and could be isolated and grown in quantity in a laboratory. The bacterium could be aerosolized and released into the air among large unsuspecting groups of people. Because symptoms do not develop immediately, people could travel over a large geographic area before becoming contagious and possibly infecting others. Controlling the disease would then be more difficult.

## Can pets and other animals get plague?

Yes. Pets and wild rodents can get plague. If you think your pet or animal was exposed, limit contact with the animal and call your veterinarian.

